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SATHWIK POCHAMPALLY

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EDUCATION

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

B.S. in **Computer Science**
College of Engineering
August 2017 – Present

Activities and Societies:
- Course Assistant x2, Head of Corporate Relations for CS 196 - Freshman Honors
- Association for Computing Machinery

CHIREC INTERNATIONAL SCHOOL

International Baccalaureate Diploma Programme
June 2012 – May 2016

Activities and Societies:
- Secretary-General, CHIREC Model United Nations [2015]
- Lead Organizer, CHIREC Fest [2014]
- Deputy Head Boy [2014-15]
- Cultural Committee Head [2015-16]

COURSEWORK

- Introduction to Computer Science
- Freshman Honors
- Discrete Structures
- Software Design Studio
- Biostatistics
- Data Structures *(in progress)*
- Computer Architecture *(in progress)*
- Linear Algebra *(in progress)*

SKILLS

PROGRAMMING LANGUAGES:

(in decreasing order of proficiency)

Java • C++ • Python • R • JavaScript

FRAMEWORKS / LIBRARIES:

OpenFrameworks • OpenCV • TensorFlow • numpy • matplotlib • pandas • dplyr • ggplot2 • ReactJS • React Native

EXPERIENCE

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

COURSE DEVELOPER – CS 125
January 2018 - Present
- Developing a **contextual awareness**, BLE-beacon based **React Native** application to help improve the usefulness of office hours to students
- Developed Android programming assignments to teach students about JSON and HTTP REST APIs
- Organized inaugural CS125 Project Fair for students to show off their final projects

NATIONAL CENTER FOR SUPERCOMPUTING APPLICATIONS

RESEARCH INTERN – SPIN PROGRAM
June 2018 – July 2018
- 18 of 250 applicants chosen to be a SPIN Intern
- Evaluated and demonstrated the effectiveness of using **image classification** in predicting the drought and heat resistance of bioenergy crops

LV PRASAD EYE INSTITUTE CENTER FOR INNOVATION

RESEARCH INTERN
August 2016 – December 2016
- Part of an award-winning team that worked on **low-cost clinical prototypes** of **medical devices** for diagnosing ocular and neurological conditions
- Developed **computer vision** image acquisition programs in Python to capture low latency, high frame-rate video

GIRLS CODE CAMP

INSTRUCTOR and CORE TEAM MEMBER
June 2016 – February 2017
- Conducted **introductory computer science workshops** for 800 girls between the ages of 12-16
- Led Hyderabad's largest all-women hackathon for middle school and high school girls

PROJECTS

PHISHING TRIP

- Developed a set of **competing neural networks** to generate spam e-mails and predict the behavior of industrial spam filters
- Built an **LSTM network** to generate sequences of characters that could bypass a spam filter

CAMERA MESH NETWORK

- Developing a machine learning algorithm that can contextually detect significant events in a video feed
- Studying the usefulness of a mesh network of cameras that can contextually predict/detect events in reducing cost in security applications